

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A process for the quantitative determination of 25-hydroxy-cholecalciferol in animal feed which comprises the steps of

a) dispersing [[the]] a feed sample in water to form an aqueous dispersion and adding to the sample a defined amount of an internal standard compound having a mass different from 25-hydroxycholecalciferol and having a polarity similar to but different from 25-hydroxycholecalciferol which is a derivative of, an isomer of, or isotopically labeled 25-hydroxycholecalciferol to obtain an aqueous dispersion;

b) extracting the aqueous dispersion with tert. butyl methyl ether;

c) submitting the ether extract to semipreparative HPLC;

d) collecting [[the]] fractions containing 25-hydroxycholecalciferol and the internal standard compound;

e) submitting the fractions collected in d) or an aliquot thereof to HPLC combined with mass spectrometry;

f) determining [[the]] MS peak areas of 25-hydroxycholecalciferol and of the internal standard compound added; and

g) calculating the amount of 25-hydroxycholecalciferol by computing the MS peak areas measured.

2. (original) A process as in claim 1 wherein the standard compound is 26,27-hexadeutero-25-hydroxycholecalciferol, 25-hydroxy-ergocalciferol, or 1 α -hydroxy-cholecalciferol.

3. (original) A process as in claim 2 wherein the standard compound is 26,27-hexadeutero-25-hydroxycholecalciferol.

4. (previously presented) A process as in claim 1 wherein the semipreparative HPLC is carried out on silica gel as the stationary phase and an isopropanol:ethyl acetate:isooctan mixture as the mobile phase.

5. (original) A process as in claim 4 wherein the mobile phase is isopropanol:ethyl acetate:isooctan in a ratio (by volume) of about 1 : 10 : 89.

6. (canceled).

7. (currently amended) A process as in claim 1 wherein the analytical HPLC of step e) is carried out in a chromatography system comprising a trapping column ~~on which the substances to be measured are concentrated, and the intrinsic analytical column for separation.~~

8. (currently amended) A process as in claim 4 wherein the stationary phase in the analytical HPLC is a modified silica gel ~~such as Aquasil C18, 3 μ m.~~

9. (previously presented) A process as in claim 7 wherein a gradient of water containing 0.05 % (vol/vol) formic acid and methanol containing 0.05 % (vol/vol) formic acid is used as the mobile phase.